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Reply to Office Action of August 24, 2005

### REMARKS/ARGUMENTS

Claims 1-6, 8-12 and 14-46 were presented for examination and are pending in this application. In an Official Office Action dated August 24, 2005, claims 1-6, 8-12 and 14-46 were rejected. The Applicants thank the Examiner for his consideration and address the Examiner's comments concerning the claims pending in this application below. Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections and withdraw them.

#### **Rejection of the Claims under 35 U.S.C. §102(e)**

Claims 1-6, 8-12 and 14-46 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,766,348 ("Combs"). Applicants respectfully traverse these rejections in light of the following remarks.

MPEP §2131 provides:

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegall Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir.1987). "The identical invention must be shown in as complete detail as contained in the claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989).

The claims as currently amended recite features lacking in the applied references. For example, independent claim 1 recites, among other things, "invoking callback interfaces of registered applications to dynamically allocate roles and assignments to one or more of registered applications of the plurality of high-availability-aware applications to achieve a desired redundancy level based on application type information." Combs fails to disclose the establishment of a

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redundancy level based on application type information nor does Combs disclose allocation of roles and assignments to achieve a redundancy level.

Combs appears to disclose a "system for exchanging data between a user and a distributed resources allocation handling system that allocates computer resources...." Combs Col. 2, lines 38-41. The system described in Combs employs a resource allocation system agent that "communicate one with another using a difference communication protocol. The elements of the resource allocation handling system provide an efficient load balance mechanism that allocates resources to users on the basis of similar domain and greatest remaining capacity." Combs Col. 2, lines 57-62. (Emphasis added) Put succinctly, Combs "provides a method of load balancing a plurality of resources in a distributed resource allocation system operating across a plurality of domains within a computer network." Combs Col. 2, line 66 – Col. 3, line 2. The Applicants' invention manages high-availability-aware ("HA-aware") components by first registering the components and then dynamically allocating roles and assignments to one or more of the components to achieve a desired redundancy level based on component type information. These elements are lacking in Combs.

High-availability systems need to detect and recover from a failure in a way transparent to its users. For example, if a server in a high-availability system fails, the system must detect and recover from the failure with no or little impact on clients. The Applicants' invention discloses a method and system to ensure that HA-aware systems recover from failure with little to no impact on the user. One approach employed by the Applicants is to use, allocate, and efficiently manage redundant systems based on several criteria. To accomplish this, the invention disclosed and claimed by the Applicants registers HA-aware components and determines a redundancy level based on the component type information. Once registered, the Applicants' invention allocates assignments to a predetermined number of secondary components selected from the registered components based

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on component type information. This redundancy level provides a degree of preparation and planning to act quickly, efficiently, and seamlessly when failures occur. Combs simply load balances resources currently being used. The two inventions are clearly distinct.

Combs discusses only how failures in its resource allocation system agents ("RASAs") are dealt with. In the text cited by the Examiner, Combs states, "Failover is relatively easily and rapidly achieved in the case that one of the two co-located RASAs fails or encounters an error condition." Combs Col. 4, lines 10-12. Combs does not proactively manage resource allocation to minimize user impact due to a resource failure. Rather, Combs reacts to failures and system overloads by having its RASAs access a centralized database and reallocate or balance resources. The two concepts attempt to achieve the same goal: minimal user and system impact, using different techniques. The Applicants' invention monitors and anticipates failure prone systems as well as identifies systems in which a failure would not be tolerated. Once identified, the Applicants' invention proactively allocates resources so that if and when a failure occurs, the impact is minimized. Combs apparently discloses a system of agents that monitors a system and reacts by reallocating resources.

These distinguishing features are clearly disclosed in claim 18 wherein assignment allocations provide "secondary applications." Combs does not disclose a secondary application of resources nor does Combs disclose any type of redundancy or backup application provision.

Combs does not disclose a proactive registration and allocation of applications to provide a redundancy level of secondary applications. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP 2131. As Combs fails to disclose each and every element set forth in claim 1, claim 1 is not anticipated by Combs.

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Independent claims 18, 25, 30, 33-36, 40, 41 and 45 all claim among other things, with varying language, an allocation of resources to proactively provide secondary applications and/or a redundancy level. For at least the same reasons as discussed above with respect to claim 1, claims 18, 25, 30, 33-36, 40, 41 and 45 are not anticipated by Combs. As independent claims 1, 18, 25, 30, 33-36, 40, 41 and 45 are not anticipated by Combs, neither are the claims that depend from them. Accordingly, the Applicants respectfully request that the rejections of claims 1-6, 8-12 and 14-46 under 35 U.S.C. 102(e) as being anticipate by Combs be withdrawn.

In view of all of the above, the claims are now believed to be allowable and the case in condition for allowance which action is respectfully requested. Should the Examiner be of the opinion that a telephone conference would expedite the prosecution of this case, the Examiner is requested to contact Applicants' attorney at the telephone number listed below.

No fee is believed due for this submittal. However, any fee deficiency associated with this submittal may be charged to Deposit Account No. 50-1123.

Respectfully submitted,

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